



Restoring Electrical Service after a Flood

CAUTION: Wear rubber gloves and rubber-soled boots for all work with electrical circuits. Rubber is an insulator and will help protect you from electrocution.

After a Flood

Your electrical system should be thoroughly checked and repaired by an electrician. If such service is unavailable and you need to do your own repairing, proceed as follows:

- ① Turn power off. Disconnect the main electrical power switch and other switches controlling pumps or outbuildings. If your main switch is located in the basement, be sure all flood water has been pumped out before you attempt any work on the electrical system.

Stand on a dry board when touching any switches and use a dry stick or wear rubber gloves to pull handles. Remove all branch circuit fuses or place circuit breakers in off position to ensure that power is off. Disconnect all plug-in equipment and turn off the switch at each piece of permanently connected equipment. Unscrew all light bulbs.

- ② Clean and dry the system. If flood water covered your first floor, electrical outlets and switches are probably wet. They must be dried before service can be restored.

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*Extension Agent's Hand-book
for Emergency Prep-eration
and Response* (Texas
Agricultural Extension
Services and the Hazard
Reduction and Recovery
Center)

Remove the covers from switches, convenience outlets and other electrical connections. Pull receptacles, switches and wires about 2 inches out from their boxes. Do not disconnect the wires.

Clean out mud and dirt with clean water. Allow wires and connections to dry. Use extreme caution in cleaning mud and dirt from the main entrance box. Because the power line enters here, this is the most hazardous part of the electrical system to

work on. Assume the sewer line is hot even if a test shows power is off. Never hose out a hot switchbox. Wear rubber gloves and rubber soled shoes. Do not touch anything wet or stand in water while working on the box.

In an emergency, pull the electrical meter from its base to disconnect the power. Notify the electric company that you broke the seal, lock or tag.

Let electrical wires and connectors dry completely. This may take days depending on how wet the system is and if any heat is available.



“If there is any sign of smoking or heating, if the fuse blows or circuit breaker trips, remove all fuses and open the main switch.”

- ③ Check the system for electrical shorts. Stand on a dry board or ladder and wear rubber gloves and rubber-soled shoes. Check the main switch box to be sure all fuses are removed.

Close the main switch and look for sparks or smoking wires. These indicate shorted switch connections. If you see evidence of such shorts, carefully try to correct the problem. You may need a new switch.

If the switch is in working order, open the switch and insert a fuse in one branch circuit. Close the switch to check for shorts in that branch circuit. If the fuse doesn't blow immediately, wait at least 15 minutes to check for slower electrical leaks. Smoking wires and sparks in the circuit also indicate trouble and you should carefully inspect all parts of the branch circuit you are checking.

If there are any signs of smoking or heating, if the fuse blows, or circuit breaker trips, remove all fuses and open the main switch. You may need to do additional cleaning or drying, or you may possibly need to replace circuit parts. Repeat steps for each of the other circuits one at a time.

After you have checked all the circuits and found them in good condition, once again remove all fuses and open the main switch. Replace wires for electrical receptacles, switches and light outlets in junction boxes. Replace covers, then check each branch circuit again by replacing one fuse at a time and closing the main switch. If everything is okay, close the main switch.

- ④ For 24 hours be careful when using receptacles and switches. There may be slow leaks which could cause shocks. Do not

plug in electrical appliances that were flooded until they are reconditioned.



- ⑤ If some circuits are faulty, use only the undamaged circuits. Do not overload undamaged circuits with too many lights or appliances until normal capacity is restored.
- ⑥ Some newer homes may have a ground fault circuit interruption system with their circuit breaker. This will probably need to be replaced.